

SEQUENCE LISTING

5 <110> Markl, Isabel
 Tomigahara, Yoshitaka
 Liang, Gangning
 Fu, Hualin
 Jones, Peter

10 <120> Methylation Altered DNA Sequences as Markers Associated with Human Cancer

<130> 47465-14

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<170> PatentIn version 3.0

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 35 aataagggcc tctgcacacg cgggcccatt ggaggggagg aactgcgaag tcttcccga 300
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 agatgccatc tcaattccag gtgtctctgc tgctttgaac gcgggaaacc cacgcaaagg 540
 45 agtgatttcc aaggccttct gtttgaata tctttaatcc tccccttatt aactggaaaa 600
 actcccacgc atccttcagg gctcagctca aatgtccttt atntctgcag ngaaactttc 660
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50 <210> 30
 <211> 280
 <212> DNA
 55 <213> Homo sapiens

<220>
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 <222> ()..()
 60 <223> "n" refers to an undetermined base

<400> 30
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 5 ttaaaacgcc ctacagaaaa tctcggcgaa gtccccggag aactctgggt tctaagatca 120
 gctggggcgca ctttctccgg gacgtccctt cttctcgggt tcagcgcctt cctgccctca 180
 10 gccgcgcng tnttgttttg gtggcaaact gaaataagaa atggaaatat attggccttt 240
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15 <210> 31
 <211> 270
 <212> DNA
 <213> Homo sapiens
 20 <220>
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 <223> "n" refers to an undetermined base

25 <400> 31
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 30 tctgcacca aatgcaggac tggtagctta aggagctgag aagtctgatt taccgggcct 180
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35 <210> 32
 <211> 347
 <212> DNA
 40 <213> Homo sapiens
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 45 <223> "n" refers to an undetermined base

<400> 32
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 cgccccgggg gtttccacgc gtgtctctaa ccgcggccgc taagccgaat tctgcagata 300
 60 tccatcacng aantctgcag anatncatcg nccaannca ccgcact 347

5 <210> 33
 <211> 342
 <212> DNA
 <213> Homo sapiens
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 <222> ()..()
 <223> "n" refers to an undetermined base
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 gtcgttcccc ccggacagcc ctacgccggc aaaggtctcg agatgtgagt agtgagagcg 180
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 <210> 34
 <211> 370
 <212> DNA
 <213> Homo sapiens
 30
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 <222> ()..()
 <223> "n" refers to an undetermined base
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 40 gcagagccct gtcacctctg cagccccagc tcccagcgcc ctgggctttc caggcacctg 120
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 45 cacatgcccc tctgaccctc cgagttctcc tctaaaaatg gggctgacag ccgctacctc 240
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 60 <222> ()..()
 <223> "n" refers to an undetermined base

5 <400> 35
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 acccccagct caggggacct tttgtctgaa cgccagagct actgaccagg tcggggggcc 180
 10 ggggccaag ccgaattctg cagatatcca tca 213

15 <210> 36
 <211> 173
 <212> DNA
 <213> Homo sapiens
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 20 <221> misc_feature
 <222> ()..()
 <223> "n" refers to an undetermined base

25 <400> 36
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 30 gcnccgtctt ggggtaacct ctancccca cccgngttn cnccttaatg etc 173

35 <210> 37
 <211> 369
 <212> DNA
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 40 <221> misc_feature
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 <223> "n" refers to an undetermined base

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 tgacacaatc gcccgccgt cctccctcgc tgggagccga ttcagcctgt gccgagcctc 180
 50 tcccttcgcg tgcctctgcg cacagcgggtg gcaccgcagg actccgggtc cccccgggtc 240
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 55 gggggcgga gttgaaatac tgggacagaa acacctgcc gtccaaggg acggaaaact 360
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60 <210> 38
 <211> 123
 <212> DNA

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<213> Homo sapiens

<220>
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<223> "n" refers to an undetermined base

<400> 38
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    gtg 123

<210> 39
<211> 450
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20 <213> Homo sapiens

<220>
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25 <223> "n" refers to an undetermined base

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    gccaaggaaa ataggaaaac atatcctgcc ccggggacac cttctggaac tatgaccaca 180
35 tgcacttgac cttccggaac aatcaccgca tgcacctgac ctcccggaac tgtcaccacc 240
    gcgcgcacct gacctcccg cactgtcagc accgcgcgca cctgacctcc cggcactgtc 300
    atcaccgcgc gcacctcacc tcccggaact gtcaccaccg cgcgcacctg acctcccggc 360
40 actgtcacga ccgcgcgcac ctgacctccc ggaactgtca tcaccaggcg cacctgacct 420
    cccggcactg tcacgaccgc gcgcacctca 450

45 <210> 40
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    <212> DNA
    <213> Homo sapiens

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55 actccgctgc tttcccacgt tcttgagca gcagccggaa taaagcgccc atggccttgc 180
    cctttgagtc tcggaggatg tttgccactc caacaatgga cttttaataa attcaggggt 240
60 caaaaggcgt gtgtgtgggg ggggagaaaa gttacaaatc agcacttgaa accgaacaca 300

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taccgcttc cttgtccgac acgtcggcgc a 211
50
<210> 43
<211> 141
<212> DNA
<213> Homo sapiens
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<400> 43
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gccgggaggt caggggagct gaaagaagga agaattcagc cacctctcag catccctggt 120
60 acctcgagga cgcgcctctc a 141

<210> 44
 <211> 559
 <212> DNA
 5 <213> Homo sapiens

 <400> 44
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 aggggtgagga agttagctgg agctttttta agtgcactc caaagagaat tttgctcaca 180
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 gaataagccg caccctctgc ccagcagatc cttgcgcgag tagccctctt tccttggggc 300
 taatcaagtg catgccacat gtcaccactc tcagctggca attcttctc agaggcgcag 360
 20 actttcacgg aatccccagc aggggggggtt aagagattca ggggaggccc cgcccgtgcc 420
 ttccacaaaa gtcgctttac cgtggctcgt gtctgcggc cccaaggggg tagcctggga 480
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 25 ccatgtgaga ggcaaaatt 559

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 30 <211> 433
 <212> DNA
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 40 ttacatcata atccaagaat acgaactaca gtatattctt acagcaaagt tattccttaa 240
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 45 agtcttgacc gagaaagacc aacaacttgg gggggaagaa aacaacttca gagccagagc 360
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<210> 46
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 55 <213> Homo sapiens

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accaccccct cgctggc cg aatacagcat ctgcaccgag ttcccagaga cgtcaaccc 180

agcaaattccc ttaattgggtg gacatgaaaa tccagggcct tgtgctgtaa taacagagtc 240

5 ctgggggcct ggggagtttg tgccgcttgg agctcagggt tctgggacag aggtgagcg 300

cagggcaggg aggcaggtct cacctggcac ctcccagagt cctcgccgag cagatggaag 360

10 cagaggtctct cgcgcccggc ccccgccggg agacctctct ctctttccct cggcctgctc 420

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15

<210> 47

<211> 403

<212> DNA

<213> Homo sapiens

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<400> 47

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25 agggaggggac cttccacag ggaatggcca aggagctagg tcttcagggc ttgcatggcg 180

tgagtggtgt gctcaggtgc acagtgaagc aaacctgagg ggacttgggc cctgcgtcct 240

30 ccagcacaca cgcacccttt cgcgctcaca tccggggcac ccaccgtgg aatatgtgag 300

ccgcacttgg ccagccacga gttccagggc caggaagtcg tgcttctcgt tcaggcgccc 360

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35

<210> 48

<211> 155

<212> DNA

<213> Homo sapiens

40

<400> 48

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50

<210> 49

<211> 256

<212> DNA

<213> Homo sapiens

55

<400> 49

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60 ccccgaaag gtggtttggg ccttggaaca ggctagaggc aggagtccat gatgcagaga 180

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 <212> DNA
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15

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<210> 51
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25

<400> 51
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gtcccggcgg ggccaggcgt ttgtgggcgg gtgacgggga tctagggctt ccgctcgtga 120
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45

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50

agaggcagcg ggaaccctgc acacagccgg gcaggcgagt ccaaaccgga aaagacagcc 180
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55

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<211> 307
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 10 aacttttaaag gcccaaagat cctgaaaatt ccgaaagcga aactgcgggc tgggtctccag 180
 aagtttgaga acgggtctccc aggttttcca gcgtcgctccc gggattctcg gacaccacaa 240
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 15 tcccccta 307

20 <210> 54
 <211> 182
 <212> DNA
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 30 ca 182

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 <211> 523
 <212> DNA
 <213> Homo sapiens

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60 <210> 56
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<213> Homo sapiens

<220>

<221> misc_feature

5 <222> ()..()

<223> "n" refers to an undetermined base

<400> 56

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<210> 57

40 <211> 438

<212> DNA

<213> Homo sapiens

<400> 57

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<210> 58
 <211> 611
 <212> DNA
 <213> Homo sapiens

5

<400> 58
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<400> 59
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 tgggacagct ttctaggttc cactgcgacc tactttccgc tccctgagtg cttctttgct 180
 gaaactgcag gcgaaaagat ctctttccca gaccgcagcg cactttgaga aggggctcaa 240
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<210> 61
 <211> 580
 <212> DNA
 <213> Homo sapiens

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 10 tgagcaaagc taaagggctc cgattcgtgc aagccaaggg ctgcccctcc taccctgtcc 180
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 tcattgagat tgctgtgcaa cgagacacag tcaactctgat acagcaaacc ctgcaggggtg 360
 20 tatcagggtc ccctctgcat gccctgggac ctctctatct tgcctacaa gtaggggtca 420
 taaaatacga cgctgaatcc aaaggccttg gctcaaatg caaccgcctg cctcatgcaa 480
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 25 gaatctgtc cagctctga acccgcgac ctcaagccga 580

<210> 62
 <211> 633
 <212> DNA
 <213> Homo sapiens

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 <400> 62
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<210> 63
 <211> 703
 <212> DNA
 <213> Homo sapiens

60

<400> 63
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 <211> 420
 <212> DNA
 30 <213> Homo sapiens

<400> 64
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<210> 65
 <211> 496
 50 <212> DNA
 <213> Homo sapiens

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10
<210> 66
<211> 637
<212> DNA
15 <213> Homo sapiens
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<221> misc_feature
<222> ()..()
20 <223> "n" refers to an undetermined base

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50 <213> Homo sapiens

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 gggctgggga catgtggtga tgggtcaggg atgtatggtt agcaacatgt gttcaagagg 540
 10 cagtgttatg ggctagagac gtgtgggcat ccaccaggaa taagtgtttg ccggg 595

 <210> 68
 <211> 580
 15 <212> DNA
 <213> Homo sapiens

 <400> 68
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 ttttatccat catctaattg tgacagctta tttgccttta taccataaga tggggagtag 180
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 ttgaccgttc cttggagtga aggctccgca ttcagacgcc tttcgctta cgtcatcata 480
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 40 <210> 69
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<210> 70
<211> 748
<212> DNA
15 <213> Homo sapiens
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agaagacttg aactttctcag agaaaaaac agtctacaga cttcatttta tgctgtcctc 360
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40 atagcacctg cctggctgca tcgccccaca gtgctgcaat gagcatccaa cgagagaaag 540
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50 <210> 71
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55 <213> Homo sapiens
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60 <223> "n" refers to an undetermined base

<400> 71
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 ggcaatcaaa ggacttcctc tccctctaag gccaggagg aaatgtggct gggactccaa 180
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15 <210> 76
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45 <210> 77
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 <212> DNA
 <213> Homo sapiens

50 <400> 77
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20 <210> 78
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<212> DNA
<213> Homo sapiens

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<222> ()..()
<223> "n" refers to an undetermined base

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 ggatacctgc tcagacagga ccttcatgaa agccaggctg tgagggtgtg tggggaatgc 720
 35 ataattgata ggccatcggt cggaggccct cctggaggac caaatgtaa tcagcagtgg 780
 cgagcttggt cagcagagga attcctttta catcctggtg aggccaaaga cctggcaagc 840
 aagtcctctt ggtcattaaa gaagcctc gacttgangc aggnacactt aggtcactgc 900
 agccacaaaa atctttgntg ctggattcna aagtaggcat tggggctggg atctgggctc 960
 40 tggcatcctt gancgtgtcg ggggcaaaa 989

40

<210> 84
 <211> 250
 <212> DNA
 <213> Homo sapiens

45

<220>
 <221> misc_feature
 <222> ()..()
 <223> "n" refers to an undetermined base

50

<400> 84
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 5 ctcgaggcgc ccgtncgggt cacgtgaggt gggggcgggc cgaagagggg ggctcccctc 120
 ctctgccgc agggttggcc gcaagtgcgc ttcaagaggc gcttgatgac ggtaaatgtt 180
 gcagcccgga agatgacttt tttctcctcc ttgggttgcg gcaggccggt agtgggaggt 240
 10 cgctcccga 250

<210> 85
 <211> 402
 15 <212> DNA
 <213> Homo sapiens
 <220>
 <221> misc_feature
 20 <222> ()..()
 <223> "n" refers to an undetermined base

<400> 85
 25 ttctcccttg tcatccctt accagagcca cagaaattat ccctgtgggc tcccttgctc 60
 tcaactcgcc ttttctggag ttaagagatc caagccaact actgggtctg ttccctgcta 120
 30 aaatcttagg ccggcgctcc atccacccat ccccatgcct aggactttta agctggcaac 180
 ggtacctggg tttagttttc ccttcgtata tcaactatctt cgtngcttac cttcttgctg 240
 cttaaagttcc accgatgtgc aaggngatta accactaaag tgcacctgac actactcttg 300
 35 acaaattgca gttgggaggt gagttgatga ctggccggta aatcaaaagt gcttatttag 360
 ggagtgaggg ggcccgggc anaagccgan ttccagcaca ct 402

40 <210> 86
 <211> 595
 <212> DNA
 <213> Homo sapiens
 45 <220>
 <221> misc_feature
 <222> ()..()
 <223> "n" refers to an undetermined base

50 <400> 86
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 agcgggtgtt gaccggagac ttttcaatgg tgcaaaatga cacactgctt ttgacttggg 120
 55 gatctgtccc ttgtggcacc agaagctaca acaggtncac ctggattcca gctctagctg 180
 gactcggtaa ttgctaagtg ccagctctga agtctgtgat tccgtggaaa tccctttcaa 240
 60 gcccgaaattc tgttttttat gggcctcttg tccaaacagt ttgacttgtg aactctgttt 300

ctgtcaagtt gacac[REDACTED]gtg cttggcacc c attcatgagc cagatgaaag cggctaaatg 360
 cccgaaaaaa taaaggnttt tacctttttt ttgaaccatt ggtgagcatn taaaaaatt 420
 5 agggaaggta aaaccaacc nggncaaac caactnaaca nttttttttt ccnaaacaag 480
 ggggggctan tttttcactt ggaaaaacaa acaattttta ttgantcttg ananggtgga 540
 10 naacccaaaat tttttgttgg gttgggttcc gnagnccgaa ttntgcaaat ttctt 595

<210> 87
 <211> 304
 <212> DNA
 15 <213> Homo sapiens
 <220>
 <221> misc_feature
 <222> ()..()
 20 <223> "n" refers to an undetermined base

<400> 87
 25 cgtggcccgga tgcattcagg gagccctctg tgttggccgc atagcagggtg tagttgccgg 60
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 gaatccggac agagccactg gccagaatgt ggttttctaa agaacagtgg agaaaagagg 180
 30 catgttacag tcgtaacgct tgaaggaaat gaagatagtg gttagagcca taagcaagta 240
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 cgca 304

<210> 88
 <211> 296
 <212> DNA
 40 <213> Homo sapiens
 <220>
 <221> misc_feature
 <222> ()..()
 45 <223> "n" refers to an undetermined base

<400> 88
 50 ggctttcgnt aggagttaat ggggcattgg ngggtgggat ggcagggctg ccagcatctg 60
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 ccgccgcatt agccccttgt gcttcaggga acagagcatc cgtgatggat gagactttta 180
 55 tttaaagtaat gagacattta taatcgcggt tatctccaaa attaggcctt ttagcaatta 240
 ttcctgggga atattcctcc ggtagatagc tcccttttta gaacaacgtc ggcgca 296

60 <210> 89
 <211> 220

<212> DNA
<213> Homo sapiens

5 <220>
<221> misc_feature
<222> ()..()
<223> "n" refers to an undetermined base

10 <400> 89
attggcccgcn caggcgggaa acanctggn nttctctnac cgttntccag cactgcccag 60
accaggagggc gcaggagag gaggggncag cggttccng accgctcctc ccgctgtccc 120
15 tgetctccag cctntgcctc tgcaggagcc cgcgggantt gcccaggcc cctgtcccca 180
cctgtggctc ccgtctggt cgtccccggg gccgcggcaa 220

20 <210> 90
<211> 273
<212> DNA
<213> Homo sapiens

25 <220>
<221> misc_feature
<222> ()..()
<223> "n" refers to an undetermined base

30 <400> 90
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gactgcagcg aggagccggg gcggcgctcg gagtaatcac cggcggcatc aaaaagcgcc 120
35 atcatggcat cgaggtcgag gtctgcttgg gagccggtgg cgcgcgcgag caaggcagat 180
gcctgcaggc gcatatccag ctcggttagc ctccatacct cccacaggat ttcttccaca 240
40 gaggcttggg cttgtatagc ctgccgcccc gca 273

45 <210> 91
<211> 361
<212> DNA
<213> Homo sapiens

50 <220>
<221> misc_feature
<222> ()..()
<223> "n" refers to an undetermined base

55 <400> 91
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ctgcgtctcc ccgccagcta aggaagttga gtgaaggag cgttgccgctc tgggaatcgt 120
agtcctcaca aaggcgtgag taggcggcaa ataaggattt gggtttagcc ttggggattc 180
60 actcctgtca aagctgttag agaagctccc anaactcnta aagtaacaga aactacttgc 240

5 ggcaacattt gtaacttcca cctgggtcat tatcttccac tgttaccttg tgttctagat 300
aagttataat ttattctaca tatcgttcag aagtcttgtg cctgttccat attgtnagca 360
t 361

10 <210> 92
<211> 462
<212> DNA
<213> Homo sapiens

15 <400> 92
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gctccctcct tcttgcagga taaactctaa actccttagc acaacgtggg agccttctca 120
20 gagactgggt ccaaccctatc tccagccgca gcctccctc ctggcccccac tgccacaccc 180
ccgggacctc ggccacactg agcctctccc gggttcccag gatacaacac tcgcccattc 240
atagtgtggt gccttttgca cgtgctgttc ctctgcttgg ggatgctgtt ggtctttctc 300
25 agccaggtga agaggacgt gaatgtcacc tgcttgagta tcaggaccgg ggactgggcg 360
ctggacctag actcttggcc ctggagagaa gccctgcatg gggccgcagc ctgcccccg 420
30 ccctgctcac agaaaagctc agccttgcag ccgcgtggga ga 462

35 <210> 93
<211> 591
<212> DNA
<213> Homo sapiens

<400> 93
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40 ggcgccctcc agctgtaggt gggtagtggc agaacaggag ggtgagggga gagtccgaac 120
tgtccccact tggcgttcc ctccccactg gggggccctg agccagtggc ctctctctc 180
45 ggggcctccc cggaaggagc caaggtctgt ctgcgaggca ccggtccccg gccacggcca 240
tcagccccca gaggtggatc agggcatcac cccactcca cagctgaggc caggggggtca 300
gggaggcaac cagggcagac ctggaacctg gctctgagac aggacggccg agggcccctc 360
50 cactctccct ccctcggggg gggcactgac ctggacgcca aagatgtcct cacactgggtg 420
gcgtttgagt agggccact cgacatctg gccctgcagc aggttggtgc agacggccat 480
55 ctctccacat gtcacatccg ccccgaagcg cttgcagatc cgtcggaagg gcaggttccc 540
acactgcggg gggagcagga cagacacaca tgctcttgca cgcgcacctc a 591

60 <210> 94
<211> 279
<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

5 <222> ()..()

<223> "n" refers to an undetermined base

<400> 94

10 ttntgagttt tggcctgccc acagtctagc cctggacaga gaatccgagg ctgagccatg 60

ctgcagcacc caggacactg catcccagca cctgcccga aatcagccca gggacccaaa 120

15 ggaaagcagg ctccaagctc cccggaagcc aaggaaaata ggaaaacata tcttgccccg 180

gggacacctt ctggaactat gaccacatgc atttgacctt ccggaacaat caccgcatgc 240

acctgacctc ccggaactgt caccaccgcg cgcacctca 279

<210> 95

<211> 351

<212> DNA

<213> Homo sapiens

<400> 95

25 cctttattat tggttaaact caccagaaa acccttaact cttagacagc ggctctcatt 60

30 aagcaaaagg ggaggcacat gaagctccag gcagggccgg gaggggaaccg tgaagccaaa 120

ggctctggga gccccaggc acctgcgttt gcattttcat cctggaggag accaggcctc 180

tggtgtgtaa catactcatt 240

35 gattcagtca cctgaccttt gactccatgt attttgttga gtctggatgt gtggtgtgct 300

ctgcccagca gctgggatcc acatgagcac agacatggtc cccccgcggc a 351

<210> 96

<211> 171

<212> DNA

<213> Homo sapiens

<400> 96

45 ttgagtgtcg cgtgaatacc taggggacac tcaggggaat gatggctccc ccgagaggta 60

aaggggtgaa agaaggggcc tcagcaggtt aggtcttgct gggtccttct gtagggcgctc 120

50 tgggagatag atccgtgggg ctctagggt cgccctacc cggcgcgggc a 171

<210> 97

<211> 743

55 <212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

60 <222> ()..()

<223> "n" refers to an undetermined base

<400> 97
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 cttctatttc acagaaggaa cacoggacgt cctntgtga tggcagcagc catgctgcct 180
 10 ntgtttccgc tcaggggttc tntgccacct ccaattccac ccagtctntt ggctcggct 240
 gggcttcggc tcccgcctnt gngccaaaaa ttgcaatgcc cgcggtcagg gcnctttgcy 300
 15 gagtctcacc gcctgcggag gcttgattcc ctctcaccag gcagcagcgt ttgatggcgc 360
 gtgacncccc cctttccaag cacatntntc atggccctg aatgccactt acagggcgctc 420
 cctccctgtg ctaagtgtg cctgganctt tgggtgtggc agcagcaaan acctctaccc 480
 20 ttgnggatgt tcgtttcggg gnggaaagac anatancaaa gttggtcgta aactgtaaag 540
 tgtgctggga ggaaactgag gcagggaggg cctggtgcca ctggggagcn ctgccccgac 600
 cccatgtgct tcccaggctc ccttgagacc acgtggatgg cgacttctg accttgagg 660
 25 ccgnggncct cantcctcat gctcgatggc gtcaccccc tcttggggaa atccaancat 720
 tctgacctg aaaatgcacc cnc 743

30
 <210> 98
 <211> 589
 <212> DNA
 <213> Homo sapiens

35
 <400> 98
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 tcttcaatta gcagcagcca ggggtccttg gcaggtatga gaatttgga ggacagcccc 180
 agggcatggc ccccggtgc agcaaaagt ctaagtgttc ttctgttga aggaagccca 240
 45 ggagatattg atcagctgca ggtgggggag gcccagatc ccacccttgc ctgcctccag 300
 gagaagggtc tccatgggc aaaatggagg cagagtccca ctttgcttg gcagctccct 360
 gagcatggct ccctgtggac ggagctgagt gacgtcatga ctctaggcct caacaaaaga 420
 50 gctttgaaa atcccgatga ttcgaattgt attaaatcaa caaacatcg gttgcacagt 480
 tactagaaaa cggagatctg cgtcatcact tactagacac gtgacctga acggcggctt 540
 55 ccccggtgta aacagcaaag ttctgtaacc cccatgaacg cgctctca 589

60
 <210> 99
 <211> 538
 <212> DNA
 <213> Homo sapiens

<400> 99
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 5 ccccccaact cccttaattc aagctaaact tgcagtttaa caactatagg agtgatatct 120
 acacattaat gccacacttt aacatgccta acactacaca tgaacacgct tccgggtgct 180
 10 gttacatccc gctctctccc aagcacgaga cacaggcagg atgctgacgt cctgcttctc 240
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 15 ctgtgcagggt ggctccttgc tcagcccctc aggacaacac aggtctttcc taagttacag 420
 ggagaccatc agattgtcgt gtccgagccc cctgaagtgg aaccacagt ctccattcag 480
 20 totgcctca gtttccctcc cctctgcagg gccattgctg ctgtggacgc gcctctca 538

<210> 100
 <211> 486
 <212> DNA
 25 <213> Homo sapiens

<400> 100
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 30 ccaaccagc cagcctgagc catttgcat agtggtcatt taggaaatta gcagacggga 120
 aacgctgggg agtggagtgg gccccggcct tggggactgc agagcccgt cagccctggg 180
 35 tggctgggccc cacatgggct gtgccccagg agcacaggag gaccagagg gtggccgaga 240
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 40 aggtggtgcc gggcgtgtct ggtgaaggcg ccgttggcag ctgagagag acggcggatg 420
 gggtagcgc attaccacg gtcccagttt tgaggcttga cggtagcgga aaaggacgtc 480
 45 ggcgca 486

<210> 101
 <211> 450
 <212> DNA
 50 <213> Homo sapiens

<400> 101
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 55 accggtgaga accatggggc cactcagaga ggcaaagagc ctcacccgag tgagtcctct 120
 ggcttctccc cacctgggccc gggccccagg ccgcgctgtg gttccctttc cagccgtcat 180
 60 cctgggtgga tgggaggtgg gcattctgtt caaccttgtg ggtcagggag ccagggccag 240
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actttctctt ttgaggccag tgaaatgtgt tccctggggt tgtattcctg agaaggcctc 360
 atttaaaggg agccgccaaa ccaagtgggc ttagcaaaag cagtttgtca cctggcagca 420
 5 cgtgtgagcc tcgcccggac gcgcctctca 450

 <210> 102
 10 <211> 292
 <212> DNA
 <213> Homo sapiens

 <400> 102
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 20 ccagtaatgg ggagctcacc atgcttagaa gactcttctt tgcattggagt tcgggcctcc 180
 tccctgcacc taccacccta gtggcccaa gtcttaaggc tgaaggtaa tctgtgtcc 240
 ttcagaagca aaggctgcaa ccgataccaa acagaggctg ccagcgcggg ca 292
 25
 <210> 103
 <211> 395
 <212> DNA
 <213> Homo sapiens
 30
 <220>
 <221> misc_feature
 <222> ()..()
 <223> "n" refers to an undetermined base
 35
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 40 gccttccggg gacgcggtca gggaagtcca gccggggtgc tctctgcact gcgggtgccg 120
 ggctcggcag aggccaaacc ggcaaaacga gcaggatctc ccggccccac ctagtgggc 180
 45 tccgcctgcc ccaacaacca tctgtccatc ctccctgcga gacaggtgac tttcctctct 240
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 aagacacgaa ggggaaggcg caagcttcta ccaagctcan ttgcccac tggtgccac 360
 50 ctgcctngta tttggtgact tggaggatag gaagg 395